



Unibrazed 2553T1-4

CLASSIFICATION:

E2553T1-4 per AWS A5.22, ASME SFA 5.22

DESCRIPTION:

Unibrazed 2553T1-4 is a flux cored, all position electrode with a nominal composition of 25% chromium, 9.5% nickel, 3.5% molybdenum, 2% copper and 0.2% nitrogen, Unibrazed 2553T1-4 is used to weld duplex stainless steels which contain approximately 25% chromium. It offers greater resistance to intergranular corrosion, pitting and stress corrosion cracking than 2209.

APPLICATIONS:

The weld metal exhibits high strength with excellent corrosion resistance, especially to pitting attack from chlorides in sea water. Unibrazed 2553T1-4 is well suited for welding similar materials in the chemical and fertilizer industries, offshore pipelines, sour gas lines, etc.

DIAMETERS: .045", 1/16"

SHIELDING GASES: 75-80% Ar/20-25% CO₂, 40-55 cfh

WELDING POSITIONS: All positions

CHARACTERISTICS:

Superb all position performance with a smooth, stable arc and very low spatter. The bead is shiny, smooth and silvery in appearance and slag removes easily.

TYPICAL MECHANICAL PROPERTIES	
	75% Ar/ 25% CO ₂
Ultimate Tensile Strength (psi)	124,000
Yield Strength (psi)	97,000
Percent Elongation	24

TYPICAL DEPOSIT COMPOSITION								
Wt%	C	Mn	Si	Ni	Cr	Mo	Cu	N
75Ar/25CO ₂	.03	1.10	.70	9.50	25.40	3.80	2.20	.20
Ferrite Number (WRC, 1992) - 42								

TYPICAL WELDING PARAMETERS (75% Ar-25% CO ₂) *					
Diam.	Amps	Volts	WFS (in/min)	ESO (in.)	Dep. Rate (lbs/hr)
1/16"	170	23	150	3/4 - 1"	5.4
1/16"	215	25	195	3/4 - 1"	7.0
1/16"	250	26	240	3/4 - 1"	8.6
1/16"	305	27	320	3/4 - 1"	11.5

* Optimum conditions are in **boldface type**.

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.